

Integrating geospatial information in 2020 census round- UNFPA priorities

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Value of geospatial census data



Foundations

High resolution georeferenced population data

High precision boundary data

Accurate settlement data

Integrating spatial population data with other geospatial attribute data



 Updating national survey sampling frames

Trend analysis based on consistent boundaries

Locating those "left behind" and informing service delivery

Mapping & disaggregation of SDG indicators~ 98 indicators need population data

Generating population estimates in humanitarian crises

Generating inter-censal population estimates

BECAUSE UNFPA EVERYONE COUNTS

UNFPA STRATEGY OF SUPPORT FOR THE 2020 CENSUS ROUND

1. Advocate for and support greater application of GIS in census undertakings:

To improve census quality and coverage:

- Digital cartography for census mapping
- Using high resolution satellite imagery of settlement patterns to verify EAs
- Using GPS navigation of HH by fieldworkers
- Monitoring enumeration in real time



Collection of household geospatial data

2. Strengthen national capacity for use of high resolution geo-referenced census data



Integrating census and other spatial data to map geographic accessibility to services



Using GIS/Accessmod to map access to basic EmONC in Togo

| Region | Perc. of cover Walk + motor | Perc. of cover Taxi-moto |
|----------|--------------------------------|-----------------------------|
| PLATEAUX | 70 | 94 |
| KARA | 75 | 91 |
| MARITIME | 92 | 98 |
| CENTRALE | 73 | 94 |
| SAVANES | 87 | 94 |
| LOME_COM | 99 | 99 |

Using geospatial data to update national survey sampling frames





Source: A joint project by ORNL, Flowminder and the Bill & Melinda Gates Foundation - Nigeria

Using geo-referenced census data to generate population estimates in humanitarian crises



(Source: U.S. Geological Survey)

INFP/

Integrating census & survey data for small area estimation

JNFPA

Estimating SDG indicator 3.7.1 at district level - Nepal

- DHS data alone gives only regional estimates of FP.
- Census does not have FP
 indicators
- SAE allows FP estimates at district level

Indicator 3.7.1: Proportion of women of reproductive age (15-49 years) who have their need for family planning satisfied with modern methods

Using remote sensing data for population estimation

Hybrid census-Afghanistan

Ancillary geospatial data

Vegetation index

Night-time

Output

100mx100m grid population estimates

Partnership of UNFPA, WorldPop/Flowminder, and Afghanistan National Statistics Office..

Digital statistical products for data dissemination

•Use of GIS-based platforms for storage, analysis, and presentation of spatial and non-spatial information

•Facilitating public access to the integrated geospatial data

Partnership of UNFPA, WorldPOP/Flowminder, DFID, BMGF, CIESIN to:

- Further work on use of geospatial population data in a range of African countries
- Support use of high resolution satellite imagery and micro-census data to generate population estimates where a census is not possible (beyond Afghanistan)

GRID project includes:

- Capacity strengthening
- Technical assistance
- Strategic partnerships, and multi-lateral collaboration at national and regional level

How can Working Group contribute?

- Multi-lingual GIS experts for expanding UNFPA regional census rosters
- In-country and regional partnerships to support GIS training to address skills shortages
- Guidelines, tools, and standards for use at country level- UNFPA supports censuses in 130 countries

Thank you